Background: A 17-year-old female athlete went to challenge a soccer ball when she and the opposing player missed the ball and struck each other’s right lower legs. Patient complained of immediate pain of 10+/10, and an obvious deformity was present. Patient was immediately immobilized with a vacuum splint and transported to a local emergency department. All neurovascular structures were intact with adequate responses. ROM, MMT, and special tests were deferred secondary to obvious deformity and suspected fracture. Patient’s significant past medical history included a right ACL-reconstruction (ACL-R) 16 months prior to this injury with a bone-patellar tendon-bone autograft. Patient had previously completed high school field hockey and basketball seasons without incident. Differential Diagnosis: neurovascular injury, distal tibia/fibula fracture(s). Treatment: Initial radiographic images revealed minimally displaced, right mid-to-distal tibia and fibula shaft fractures. Surgical intervention was warranted, and an intramedular (IM) rod was chosen as the method of treatment. The previous ACL screw, washer, and sutures were removed prior to IM rod insertion. Reaming was then sequentially performed starting with an 8-mm, extending to a 10-mm, and finally an 11.5-mm under direct fluoroscopic view. A Howmedica tibial rod measuring 360mmx9mm was passed down the tibial canal over a guide wire and under direct fluoroscopic view with good positioning. In order to stabilize the rod, a single medial-to-lateral screw was inserted in the proximal tibia. This was repeated distally using two locking screws. These were placed without incident and had good stability. Patient was placed in a well-padded posterior splint. Two weeks post-surgical superficial sutures were removed and the patient was placed in a walking boot and permitted to partial weight bear using crutches. At this time the patient was performing open-chain exercises for ankle and knee ROM and isometric strengthening, including stationary bike riding. Patient was permitted to walk without crutches but with walking boot 4 weeks post-surgical, while beginning balance exercises and progressing stationary bike riding. Seven weeks post-surgery, patient was released from the boot and permitted to begin closed-chain strengthening exercises. Her normal full upper body workouts were also reinstated to maintain muscle mass and core strength. Dynamic hamstring strengthening and proprioception was the main area of emphasis to ensure the ACL had significant support. The addition of proprioception exercises included lunges on Bosu ball, single leg balancing on Bosu ball, jump-landing drills, and advanced single leg hopping. The proximal locking screw was removed without incident 4-months post-surgical secondary to pain. Uniqueness: To our knowledge this is the first documented case of ACL-R tibial screw removal to treat a displaced mid-to-distal tibia fracture with an IM rod. The only literature available regarding ACL tibial screw removal was in the event of a re-injury or allergic reaction to the screw. The risk of compromising the ACL-R integrity did not outweigh the necessary treatment of such a severe fracture. The uniqueness of this case is the removal of the ACL-R tibial screw to permit the IM rod and a subsequent progressive rehabilitation program concentrating on
quadriceps and hamstring strengthening and proprioception. **Conclusion:** Tibia fractures are generally rare in athletics, although are seen in higher velocity sports, such as soccer, football, and ice hockey. The gold standard treatment for distal tibia fractures is an IM rod with locking screws. The removal of a previous ACL-R tibial screw to insert an IM rod has never been documented. However, with precise implantation and progressive rehabilitation, a successful outcome is achievable for patients who have a previous history of ACL-R and suffer a distal tibia fracture in the ipsalateral extremity. **Word count:** 585